Environmental Pollution 77 (1992) 297–299

CONTENTS OF VOLUME 77

Number 1

Effects of air filtration on spring wheat grown in open-top field chambers at a rural site. I. Effect on growth, yield and dry matter partitioning. 1
L. DE TEMMERMAN, K. VANDERMEIREN & M. GUNS (Belgium)
Effects of air filtration on spring wheat grown in open-top field chambers at a rural site. II. Effects on mineral partitioning, sulphur and nitrogen metabolism and on grain quality . 7
K. VANDERMEIREN, L. DE TEMMERMAN, A. STAQUET & H. BAETEN (Belgium)
Effects of washing fiddler crabs (*Uca pugnax*) following an oil spill 15
JOANNA BURGER & MICHAEL GOCHFELD (USA)
Environmental tritium of the Danube basin in Yugoslavia 23
MUNEVERA HADŽIŠEHOVIĆ, NADA MILIJEVIĆ, VOJISLAVA ŠIPKA & DUŠAN GOLOBOČANIN (Yugoslavia)
Influence of ozone air pollution on plant–herbivore interactions. Part 2: Effects of ozone on feeding preference, growth and consumption rates of monarch butterflies (*Danaus plexippus*) 31
M. BOLSINGER, M. E. LIER & P. R. HUGHES (USA)
Radium-226 levels and concentration ratios between water, vegetation, and tissues of ruffed grouse (*Bonasa umbellus*) from a watershed with uranium tailings near Elliot Lake, Canada 39
F. V. CLULOW, T. P. LIM, N. K. DAVÉ & R. AVADHANULA (Canada)
Some heavy metals, essential elements, and chlorinated hydrocarbons in polar bear (*Ursus maritimus*) at Svalbard 51
The late GUNNAR NORHEIM, JANNECHE UTNE SKAARE & ØYSTEIN WIIG (Norway)
Effect of nickel on some aspects of protein metabolism in the gill and kidney of the freshwater fish, *Cyprinus carpio* L. 59
P. SREEDEVI, B. SIVARAMAKRISHNA, A. SURESH & K. RADHAKRISHNAIAH (India)
Comparative toxicity of polychlorinated biphenyls to earthworms *Eisenia foetida* and *Lumbricus terrestris* 65
LLOYD C. FITZPATRICK, RAMIN SASSANI, BARNEY J. VENABLES & ARTHUR J. GOVEN (USA)
Concentrations of nitrogen dioxide throughout the state of Bahrain 71
SAMI DANISH & ISMAIL M. MADANY (Bahrain)
Removal of basic dye from waste-water using silica as adsorbent 79
M. N. AHMED & R. N. RAM (India)
Comparative studies of water quality in two brackish ponds for shrimp cultivation in a salt marsh 87
P. K. WONG, W. W. CHENG, C. H. WAI & C. N. WONG (Hong Kong)
Selected Bibliography 93
Book Reviews 97

Numbers 2 & 3

Guest editorial 97

Role of strong and weak acids and associated trace metal mobility in acid waters

Importance of natural soil processes relative to atmospheric deposition in the mobility of aluminium in forested watersheds of the Black Forest 99
S. BAUR & K. H. FEGER (Germany)

Environ. Pollut. (77) (1992)—© 1992 Elsevier Science Publishers Ltd, England. Printed in Great Britain

Charge density of total organic carbon in Finnish lakes 107
PIRKKO KORTELAINEN (Finland)
Sources of acidity in lakes and streams of the United States. 115
PHILIP R. KAUFMANN, ALAN T. HERLIHY &
LAWRENCE A. BAKER (USA)
Artificial acidification of a non-acidic and an acidic headwater stream in Maine, USA . 123
STEPHEN A. NORTON, JULIE C. BROWNLEE & JEFFREY S. KAHL (USA)
Trace metals in interstitial waters from sandstones: Acidic inputs to shallow groundwaters. 129
W. M. EDMUNDS, D. G. KINNIBURGH & P. D. MOSS (UK)
Catchment acidification—from the top down 143
J. MATSCHULLAT, H. ANDREAE, D. LESSMANN, V. MALESSA &
U. SIEWERS (Germany)

Influence of forestation and deforestation on surface water acidification

Comparative impacts of forest harvest and acid precipitation on soil and streamwater acidity 151
JAMES W. HORNBECK (USA)
Effects of clearfelling on stream and soil water aluminium chemistry in three UK forests . 157
B. REYNOLDS, P. A. STEVENS, J. K. ADAMSON, S. HUGHES &
J. D. ROBERTS (UK)
Impacts of afforestation on water quality trends in two catchments in mid-Wales . . 167
D. WATERS & A. JENKINS (UK)

Estimation and application of critical loads

An introduction to critical loads 173
K. R. BULL (UK)
A statistical approach to the regional use of critical loads 177
J.-P. HETTELINGH (The Netherlands), R. H. GARDNER (USA) &
L. HORDIJK (The Netherlands)
Critical loads for Finnish lakes: Comparison of three steady-state models 185
MARTIN FORSIUS, JUHA KÄMÄRI & MAXIMILIAN POSCH (Finland)
Critical loads and steady-state chemistry for streams in the state of Maryland . . . 195
H. SVERDRUP, P. WARFVINGE (Sweden), M. RABENHORST,
ANTHONY JANICKI, RAY MORGAN & MICHAEL BOWMAN (USA)
An application and review of the critical load concept to the soils of northern England . 205
SIMON J. LANGAN & MIKE HORNUNG (UK)

Long-term chemical changes and reversibility of acidification

Response of the Plastic Lake catchment, Ontario, to reduced sulphur deposition. . . 211
P. J. DILLON & B. D. LAZERTE (Canada)
Reversibility of lake acidification at the Round Loch of Glenhead, Galloway, Scotland . 219
T. E. H. ALLOTT, R. HARRIMAN & R. W. BATTARBEE (UK)
Timescales of recovery from acidification: Implications of current knowledge for aquatic organisms 227
R. A. SKEFFINGTON & D. J. A. BROWN (UK)

Modelling short and long-term chemical responses in catchments

Systematic comparison of ILWAS, MAGIC, and ETD watershed acidification models: 3. Mass balance budgets for acid neutralizing capacity 235
R. B. COOK, K. A. ROSE, A. L. BRENKERT & P. F. RYAN (USA)
Application of four watershed acidification models to Batchawana Watershed, Canada . 243
W. G. BOOTY, A. G. BOBBA, D. C. L. LAM & D. S. JEFFRIES (Canada)
Use of historical assessment for evaluation of process-based model projections of future environmental change: Lake acidification in the Adirondack mountains, New York, USA . 253
T. J. SULLIVAN, R. S. TURNER, D. F. CHARLES (USA), B. F. CUMMING,
J. P. SMOL (Canada), C. L. SCHOFIELD, C. T. DRISCOLL, B. J. COSBY (USA),
H. J. B. BIRKS (Norway), A. J. UUTALA, J. C. KINGSTON, S. S. DIXIT (Canada),
J. A. BERNERT, P. F. RYAN (USA) & D. R. MARMOREK (Canada)

Predicting stream-water quality using catchment and soil chemical characteristics . . 263
M. F. BILLETT & M. S. CRESSER (UK)
Sensitivity to change for low-ANC eastern US lakes and streams and brook trout populations under alternative sulfate deposition scenarios 269
R. S. TURNER, P. F. RYAN (USA), D. R. MARMOREK (Canada), K. W. THORNTON, T. J. SULLIVAN, J. P. BAKER, S. W. CHRISTENSEN & M. J. SALE (USA)
The MAGIC simulation of surface water acidification at, and first year results from, the Bear Brook Watershed Manipulation, Maine, USA 279
STEPHEN A. NORTON (USA), RICHARD F. WRIGHT (Norway), JEFFREY S. KAHL & JOHN P. SCOFIELD (USA)
Modelling episodic acidification of surface waters: The state of science. 287
K. N. ESHLEMAN, P. J. WIGINGTON, JR (USA), T. D. DAVIES & M. TRANTER (UK)